KW PK

PCT09

RAW SEQUENCE LISTING DATE: 08/30/2001 PATENT APPLICATION: US/09/830,144 TIME: 06:24:59

Input Set : A:\06501-076001.txt

Output Set: N:\CRF3\08292001\1830144.raw

4 5 6 7	Sugamata, Yasuhiro	ENTERED													
9	<120> TITLE OF INVENTION: Method for screening compounds inhibiting signal														
10 12	<130> FILE REFERENCE: 06501-076001														
	<140> CURRENT APPLICATION NUMBER: 09/830,144														
	<141> CURRENT FILING DATE: 2001-04-20														
	7 <150> PRIOR APPLICATION NUMBER: PCT/JP99/05817 8 <151> PRIOR FILING DATE: 1999-10-21														
	0 <151> PRIOR FILING DATE: 1999-10-21 0 <150> PRIOR APPLICATION NUMBER: JP 10/299962														
21	<pre>1 <151> PRIOR FILING DATE: 1998-10-21</pre>														
	3 <160> NUMBER OF SEQ ID NOS: 10														
	5 <170> SOFTWARE: PatentIn version 2.0														
	7 <210> SEQ ID NO: 1 3 <211> LENGTH: 2656														
29	<212> TYPE: DNA														
	<213> ORGANISM: Homo sapiens														
	<220> FEATURE:														
	3 <221> NAME/KEY: CDS 4 <222> LOCATION: (183)(1919)														
	6 <400> SEQUENCE: 1														
37	gtcgagatcc attgtgctct aaagacggct gtggccgctg cctctacccc	cgccacggat 60													
39	cgccgggtag taggactgcg cggctccagg ctgagggtcg gtccggaggc	gggtgggcgc 120													
43	gggtctcacc cggattgtcc gggtggcacc gttcccggcc ccaccgggcg to atg tot aca gcc tot gcc gcc toc toc toc toc toc	ccgcgaggga 180 tcg gcc 227													
44															
45	1 5 10	15													
47	ggt gag atg atc gaa gcc cct tcc cag gtc ctc aac ttt gaa	gag atc 275													
49	Gly Glu Met Ile Glu Ala Pro Ser Gln Val Leu Asn Phe Glu 20 25	Glu Ile 30													
	gac tac aag gag atc gag gtg gaa gag gtt gtt gga aga gga														
52	Asp Tyr Lys Glu Ile Glu Val Glu Glu Val Val Gly Arg Gly	Ala Phe													
53	35 40 45														
55 56	gga gtt gtt tgc aaa gct aag tgg aga gca aaa gat gtt gct Gly Val Val Cys Lys Ala Lys Trp Arg Ala Lys Asp Val Ala	att aaa 371													
57	50 55 60	ire Lys													
59	caa ata gaa agt gaa tot gag agg aaa gog ttt att gta gag	ctt cgg 419													
60	Gln Ile Glu Ser Glu Ser Glu Arg Lys Ala Phe Ile Val Glu	Leu Arg													
61 63	65 70 75 cag tta tcc cgt gtg aac cat cct aat att gta aag ctt tat	AC7													
64	Gln Leu Ser Arg Val Asn His Pro Asn Ile Val Lys Leu Tyr	gga gcc 467 Glv Ala													
65	80 85 90	95													
67	tgc ttg aat cca gtg tgt ctt gtg atg gaa tat gct gaa ggg	ggc tct 515													
69	Cys Leu Asn Pro Val Cys Leu Val Met Glu Tyr Ala Glu Gly 100 105	Gly Ser 110													
	103														

DATE: 08/30/2001 RAW SEQUENCE LISTING TIME: 06:24:59 PATENT APPLICATION: US/09/830,144

Input Set : A:\06501-076001.txt
Output Set: N:\CRF3\08292001\I830144.raw

71 tta ta	at aat	gtg ct	g cat	ggt	gct	gaa	cca 1	ttg	cca '	tat	tat	act	gct	563
72 Leu Ty 73	yr Asn	Val Le	eu His	СТА		120	Pro 1	Leu	PIO		125	1111	Ala	
75 gcc ca	ac qca	atg ac	ıt tqq	tgt	tta	cag ·	tgt '	tcc	caa	gga	gtg	gct	tat	611
76 Ala H	is Ala	Met Se	er Trp	Cys	Leu	Gln (Cys :	Ser	Gln (Gly	Val	Ala	Tyr	
77	130		-		135		-			140				
79 ctt ca		ato ca	a ccc	aaa	aca	cta a	att (cac	agg (qac	ctq	aaa	cca	659
80 Leu H	ic Cor	Mot Gl	n Pro	Lvs	λla	Leu	Tle	His	Ara	Asp	Leu	Lvs	Pro	
		Met G	LII FIO	150	niu	LCu .			155			-1-		
	45		~++		~~~	~~~	202			222	att	tat	nat	707
83 cca a	ac ila	CLG CI	.y y.t.	yca	999	999	mb _m 1	y 17-1	Tou	Luu Luu	Tla	Cue	A en	,
84 Pro A	sn Leu	Leu Le		Ата	СТА	сту			Leu .	пуз	116	Суз	175	
85 160			165					170						755
87 ttt g	gt aca	gee to	gt gac	att	cag	aca	cac	atg	acc .	aat	aac	aay	999	/33
88 Phe G	ly Thr	Ala Cy	s Asp	Ile	Gln			Met	Thr .	Asn	Asn		GLY	
89		18					185					190		
91 agt g	ct gct	tgg at	g gca	cct	gaa	gtt	ttt (gaa	ggt	agt	aat	tac	agt	803
92 Ser A	la Ala	Trp Me	et Ala	Pro	Glu	Val	Phe (Glu	Gly	Ser	Asn	Tyr	Ser	
93		195				200					205			
95 gaa a	aa tgt	gac gt	c ttc	agc	tgg	ggt -	att	att	ctt	tgg	gaa	gtg	ata	851
96 Glu L	vs Cvs	Asp Va	al Phe	Ser	Trp	Gly	Ile	Ile	Leu	Trp	Glu	Val	Ile	
97	210	-			215	-				220				
99 acg c		aaa co	ec ttt	gat.	σασ	att.	aat (aac	cca	act	ttc	cqa	atc	899
100 Thr	Ara Ar	T.VC I	oro Phe	Asn	Glu	Tle	Glv	Glv	Pro	'Ala	Phe	Ār	ı Ile	
	225	9 11,5 .		230			1	1	235				•	
101 103 atg		- a++ a	nat aa1			caa	cca	cca			aaa	aat	t tta	947
103 atg	Top 31	- 17-1 1	Tic Acr	- 99°	Thr	. Arα	Dro	Dro	Len	Tle	Lve	. Ası	ı Leu	
104 Met				1 (31.0	1111									
	112 111	1 141 1				9					- 2			
105 240			245	5				250					255	995
105 240 107 cct	aag cc	c att q	245 gag ago	5 c ctg	atg	act	cgt	250 tgt	. tgg	tct	aaa	ı gat	255 t cct	995
105 240 107 cct 108 Pro	aag cc	c att o	245 gag ago Glu Sei	5 c ctg	atg	act	cgt Arg	250 tgt	. tgg	tct	aaa	ı gat s Ası	255 t cct p Pro	995
105 240 107 cct 108 Pro 109	aag cc Lys Pr	c att o	245 gag ago Glu Sei 260	o ctg r Leu	atg Met	act Thr	cgt Arg 265	250 tgt Cys	tgg Trp	tct	aaa Lys	gat S Asj 270	255 t cct p Pro	
105 240 107 cct 108 Pro 109 111 tcc	aag cc Lys Pro	c att q o Ile (;	245 gag ago Glu Sei 260 tca ato	o c ctg r Leu g gag	atg Met	act Thr	cgt Arg 265 gtg	250 tgt Cys	tgg Trp	tct Ser atg	aaa Lys	gat S Asj 270 C cac	255 t cct p Pro) c ttg	995 1043
105 240 107 cct 108 Pro 109	aag cc Lys Pro	c att q o Ile (;	245 gag ago Glu Sei 260 tca ato	o c ctg r Leu g gag	atg Met	act Thr att	cgt Arg 265 gtg	250 tgt Cys	tgg Trp	tct Ser atg	aaa Lys act	gat S Asp 270 C cac	255 t cct p Pro) c ttg	
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113	aag cc Lys Pro cag cg Gln Ar	c att of le cot of Pro S	245 gag ago Glu Ser 260 tca ato	c ctg r Leu g gag t Glu	atg Met gaa Glu	act Thr att Ile 280	cgt Arg 265 gtg Val	250 tgt Cys aaa Lys	tgg Trp ata	tct Ser atg	aaa Lys act Thi	gat S Asp 270 Cac His	255 t cct p Pro) c ttg	1043
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg	aag cc Lys Pro cag cg Gln Are	c att q c Ile (c cct f g Pro S 275 c ttt (245 gag ago glu Ser 260 tca ato ser Med	o ctg r Leu g gag t Glu	atg Met gaa Glu	act Thr att Ile 280	cgt Arg 265 gtg Val	250 tgt Cys aaa Lys	tgg Trp ata Ile	tct Ser atg Met	aaa Lys act Thr 285	gat S Asp 270 C cac His	255 t cct p Pro t ttg s Leu t cag	
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113	aag cc Lys Pro cag cg Gln Are	c att q c Ile (c cct f g Pro S 275 c ttt (245 gag ago Glu Ser 260 tca ato Ser Med	o ctg r Leu g gag t Glu	atg Met gaa Glu	act Thr att Ile 280	cgt Arg 265 gtg Val	250 tgt Cys aaa Lys	tgg Trp ata Ile	tct Ser atg Met tat	act Thi 285	gat S Asp 270 C cac His	255 t cct p Pro t ttg s Leu t cag	1043
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met	aag cc Lys Procag cg Gln Arc cgg ta Arg Ty	c att of the control	245 gag ago Glu Sen 260 tca ato Ger Men cca gga Pro Gly	o ctg r Leu g gag t Glu a gca	atg Met gaa Glu gat Asp 295	act Thr att Ile 280 gag	cgt Arg 265 gtg Val cca Pro	250 tgt Cys aaa Lys tta Leu	tgg Trp ata Ile cag	tct Ser atg Met tat Tyr 300	aaa Lys act Thi 285	gat S Asp 270 C cac His S tgs	255 t cct p Pro c ttg s Leu t cag s Gln	1043
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat	aag ccc Lys Procag cgg Gln Arccgg ta Arg Ty 29 tca ga	c att of the state	245 gag ago glu Sen 260 tca ato cca gga ero Gly	c ctg r Leu g gag t Glu a gca y Ala	atg Met gaa Glu gat Asp 295	act Thr att Ile 280 gag	cgt Arg 265 gtg Val cca Pro	250 tgt Cys aaa Lys tta Leu	tgg Trp ata Ile cag Gln	tct Ser atg Met tat Tyr 300 aca	aaa Lys act Thi 285 cct	gat S Asp 270 c cac His C His C tgt	255 t cct p Pro c ttg s Leu t cag s Gln a ttc	1043
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat	aag ccc Lys Procag cgg Gln Arccgg ta Arg Ty 29 tca ga	c att of the state	245 gag ago glu Sen 260 tca ato cca gga ero Gly	c ctg r Leu g gag t Glu a gca y Ala	atg Met gaa Glu gat Asp 295	act Thr att Ile 280 gag	cgt Arg 265 gtg Val cca Pro	250 tgt Cys aaa Lys tta Leu	tgg Trp ata Ile cag Gln	tct Ser atg Met tat Tyr 300 aca	aaa Lys act Thi 285 cct	gat S Asp 270 c cac His C His C tgt	255 t cct p Pro c ttg s Leu t cag s Gln a ttc	1043
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat 120 Tyr	aag cc Lys Processing Controls of Controls Control	c att of the state	245 gag ago glu Sen 260 tca ato cca gga ero Gly	c ctg r Leu g gag t Glu a gca y Ala g agca	atg Met gaa Glu gat Asp 295	act Thr att Ile 280 gag	cgt Arg 265 gtg Val cca Pro	250 tgt Cys aaa Lys tta Leu	tgg Trp ata Ile cag Gln	tct Ser atg Met tat Tyr 300 aca	aaa Lys act Thi 285 cct	gat S Asp 270 c cac His C His C tgt	255 t cct p Pro c ttg s Leu t cag s Gln a ttc	1043
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat 120 Tyr 121	aag ccc Lys Procag cgg Gln Arccgg ta Arg Ty 29 tca ga Ser As	c att (continue) att	245 gag ago Glu Ser 260 tca ato Eca gga Pro Gly gga cao	g gag t Glu a gca y Ala g ago n Ser 310	atg Met gaa Glu gat Asp 295	act Thr att Ile 280 gag Glu tct	cgt Arg 265 gtg Val cca Pro	250 tgt Cys aaa Lys tta Leu acc Thr	tgg Trp ata Ile cag Gln agt Ser 315	tct Ser atg Met tat Tyr 300 aca Thr	aaaa Lys act Thi 285 cct Pro	gat 270 cac His Cys Cys	255 t cct p Pro c ttg s Leu t cag s Gln a ttc r Phe	1043
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat 120 Tyr 121 123 atg	aag ccc Lys Procag cg Gln Arccgg ta Arg Ty 29 tca ga Ser As 305 gac at	c att (c) ile (c) c cct (d) 275 c ttt (c) r Phe (d) ct (d) gaa (d) ct (d	245 gag ago Glu Ser 260 tca ato Eca gga Pro Gly gga cao Gly Gli tct aca	c ctg r Leu g gag t Glu a gca y Ala g agc 310 a aat	atg Met gaa Glu gat Asp 295 aac Asn	act Thr att 11e 280 gag Glu tct Ser	cgt Arg 265 gtg Val cca Pro gcc Ala	250 tgt Cys aaaa Lys tta Leu acc Thr	tgg Trp ata Ile cag Gln ser 315	tct Ser atg Met tat Tyr 300 aca Thr	aaaa Lys act Thi 285 cct Pro	a gat S Asp 270 c cac His O Cys c too y Ses	255 t cct p Pro c ttg s Leu t cag s Gln a ttc r Phe t atg	1043 1091 1139
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat 120 Tyr 121 123 atg 124 Met	aag ccc Lys Procag cg Gln Arccgg ta Arg Ty 29 tca ga Ser As 305 gac at	c att (c) ile (c) c cct (d) 275 c ttt (c) r Phe (d) ct (d) gaa (d) ct (d	gag ago Glu Ser 260 tca ato Ser Med cca gga Pro Gly gga cac Gly Gli tct aca	g gag t Glu a gca y Ala g agc 310 a aat r Asn	atg Met gaa Glu gat Asp 295 aac Asn	act Thr att 11e 280 gag Glu tct Ser	cgt Arg 265 gtg Val cca Pro gcc Ala	250 tgt Cys aaaa Lys tta Leu acc Thr aaaa Lys	tgg Trp ata Ile cag Gln ser 315	tct Ser atg Met tat Tyr 300 aca Thr	aaaa Lys act Thi 285 cct Pro	a gat S Asp 270 c cac His O Cys c too y Ses	255 t cct p Pro c ttg s Leu t cag s Gln a ttc r Phe t atg n Met	1043 1091 1139
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat 120 Tyr 121 123 atg 124 Met 125 320	aag cc Lys Pro cag cg Gln Ar cgg ta Arg Ty 29 tca ga Ser As 305 gac at Asp Il	c att go Ile (gag ago Glu Ser 260 tca ato Ser Med cca gga Pro Gly gga cac Gly Gli tct aca Ser Thi 329	g gag t Glu a gca y Ala g agc 310 a aat r Asn	atg Met gaa Glu Asp 295 aac Asn	act Thr att Ile 280 gag Glu tct Ser	cgt Arg 265 gtg Val cca Pro gcc Ala aac Asn	250 tgt Cys aaaa Lys tta Leu acc Thr aaaa Lys 330	tgg Trp ata Ile cag Gln ser 315	tct Ser atg Met tat Tyr 300 aca Thr	aaaa Lys act Thi 285 cct Pro	gate Aspect Care His Cys	255 t cct Pro ttg t cag s Gln a ttc r Phe t atg Met 335	1043 1091 1139
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat 120 Tyr 121 123 atg 124 Met 125 320 127 gag	aag cc Lys Pro cag cg Gln Ar cgg ta Arg Ty 29 tca ga Ser As 305 gac at Asp Il	c att of the control	gag ago Glu Ser 260 tca ato Ser Med cca gga Pro Gly gga cac Gly Gli tct aca Ser Thi 329 gcc aca	g gag t Glu a gca y Ala g agc 310 a aat r Asn a aat	atg Met gaa Glu gat Asp 295 aac Asn acg	act Thr att Ile 280 gag Glu tct Ser agt	cgt Arg 265 gtg Val cca Pro gcc Ala aac Asn	250 tgt Cys aaaa Lys tta Leu acc Thr aaaa Lys 330 aag	tgg Trp ata Ile cag Gln ser 315 agt Ser	tct Ser atg Met tat Tyr 300 aca Thr gac Asp	aaaa Lys act Thi 285 cct Pro	a gat 3 Asp 270 cac His c tgt Cys c tca y Ses a at a tca	255 t cct Pro ttg t cag s Gln a ttc r Phe t atg Met 335 a aaa	1043 1091 1139 1187
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat 120 Tyr 121 123 atg 124 Met 125 320 127 gag 128 Glu	aag cc Lys Pro cag cg Gln Ar cgg ta Arg Ty 29 tca ga Ser As 305 gac at Asp Il	c att of the control	gag ago Ser Mei Cca gga Pro Gly Gly Cct aca Ser Thi 32! Gcc aca Ala Thi	g gag t Glu a gca y Ala g agc 310 a aat r Asn a aat	atg Met gaa Glu gat Asp 295 aac Asn acg	act Thr att Ile 280 gag Glu tct Ser agt	cgt Arg 265 gtg Val cca Pro gcc Ala aac Asn att Ile	250 tgt Cys aaaa Lys tta Leu acc Thr aaaa Lys 330 aag	tgg Trp ata Ile cag Gln ser 315 agt Ser	tct Ser atg Met tat Tyr 300 aca Thr gac Asp	aaaa Lys act Thi 285 cct Pro	a gat Set tgat Cys	255 t cct pro ttg ttg t cag t cag t cag t cag t tag t tag t tag t All the t Alg t Al	1043 1091 1139 1187
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat 120 Tyr 121 123 atg 124 Met 125 320 127 gag 128 Glu 129	aag ccc Lys Pro cag cgc Gln Arc cgg ta Arg Ty 29 tca ga Ser As 305 gac at Asp Il- caa gt Gln Va	c att of the control	gag ago Ser Med Cca gga Pro Gly Gly Cct aca Ser The 32! Gcc aca Ala The	gagger Leur gagger Glung ag gagger Ala gagger Ser 3100 aaat aat aat aat aat aat aat aat aat	atg Met gaa Glu gat Asp 295 aac Asn acg Thr	act Thr att Ile 280 gag Glu tct Ser agt Thr	cgt Arg 265 gtg Val cca Pro gcc Ala aac Asn att Ile 345	250 tgt Cys aaa Lys tta Leu acc Thr aaa Lys 330 aag Lys	tgg Trp ata Ile cag Gln ser 315 agt Ser agt Cgc Arg	tct Ser atg Met tat Tyr 300 aca Thr gac Asp	aaaa Lyss act Thi 285 cct Pro	a gata Asp 270 cac His Cys c tcac Asp 250 cac Asp 250	255 t cct pro ttg t cag t cag t cag t cag t ta t cag t All t cag t	1043 1091 1139 1187
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat 120 Tyr 121 123 atg 124 Met 125 320 127 gag 128 Glu 129 131 ttg	aag ccc Lys Processing Control of	c att of the country	gag ago Glu Ser Glu	gaggagagagagagagagagagagagagagagagagag	atg Met gaa Glu gat Asp 295 aacg Asn Lacg Thr	act Thr att Ile 280 gag Glu tct Ser agt Thr	cgt Arg 265 gtg Val cca Pro gcc Ala aac Asn att Ile 345 agt	250 tgt Cys aaa Lys tta Leu acc Thr aaa Lys 330 aag Lys gaa	tgg Trp ata Ile cag Gln ser 315 agt Ser cgc Arg	tct Ser atg Met tat Tyr 300 aca Thr gac Asp tta Leu	aaaa Lyss act 285 cct Pro	a gata Asp 270 cac His Cys to Cys a toat Asp 350 ctts 350 ctts 350 ctts	255 t cct pro tcp Pro ttg s Leu t cag s Gln a ttc r Phe t atg n Met 335 a aaa r Lys a agc	1043 1091 1139 1187
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat 120 Tyr 121 123 atg 124 Met 125 320 127 gag 128 Glu 129 131 ttg 132 Leu	aag ccc Lys Processing Control of	c att (cot (cot)) c cct (cot)	gag ago Glu Ser Glu	gaggagagagagagagagagagagagagagagagagag	atg Met gaa Glu gat Asp 295 aacg Asn Lacg Thr	act Thr att Ile 280 gag Glu tct Ser agt Thr	cgt Arg 265 gtg Val cca Pro gcc Ala aac Asn att Ile 345 agt Ser	250 tgt Cys aaa Lys tta Leu acc Thr aaa Lys 330 aag Lys gaa	tgg Trp ata Ile cag Gln ser 315 agt Ser cgc Arg	tct Ser atg Met tat Tyr 300 aca Thr gac Asp tta Leu	aaaa Lyss act Thr 285 cct Pro	a gat 270 cac His cat Cys cat Cys cat Asi Asi Asi Asi Lea	255 t cct pro tcp Pro ttg s Leu t cag s Gln a ttc r Phe t atg n Met 335 a aaa r Lys a agc	1043 1091 1139 1187
105 240 107 cct 108 Pro 109 111 tcc 112 Ser 113 115 atg 116 Met 117 119 tat 120 Tyr 121 123 atg 124 Met 125 320 127 gag 128 Glu 129 131 ttg	aag ccc Lys Processing	c att of le	gag ago Glu Ser 260 tca ato Eca gga Pro Gly Gly Gly Gly Caca Gly Gly Gla Thi 340 Cag gca Gln Ala	g gag t Glu a gca y Ala y Ala a ser 310 a aat r Asn a aag a Lys	atg Met Glu gat Asp 295 aac Asn Thr gat Asp	act Thr att Ile 280 gag Glu tct Ser agt Thr cag Gln 360	cgt Arg 265 gtg Val cca Pro gcc Ala aac Asn att Ile 345 agt Ser	250 tgt Cys aaa Lys tta Leu acc Thr aaa Lys 330 aag Lys gaa Glu	tgg Trp ata Ile cag Gln ser 315 agt Ser Cgc Arg	tct Ser atg Met tat Tyr 300 aca Thr gac Asp tta Leu	aaaa Lyss act Thr 285 cct Pro	a gate Aspect Cyse to a to	255 t cct Pro C ttg S Leu t cag S Gln a ttc r Phe t atg A Met 335 a aaa r Lys C agc A Ser	1043 1091 1139 1187

RAW SEQUENCE LISTING

DATE: 08/30/2001 TIME: 06:24:59 PATENT APPLICATION: US/09/830,144

Input Set : A:\06501-076001.txt
Output Set: N:\CRF3\08292001\I830144.raw

13 13	6 Leu 7	Gly	Ala 370	Ser	His	Gly	Ser	Ser 375	Val	Glu	Ser	Leu	Pro 380	Pro	Thr	Ser	
1.3	9 gag	aac	aaσ	agg	atg	agt	act	qac	atq	tct	qaa	ata	gaa	gct	agg	atc	1379
14	0 Glu	Glv	Lvs	Ara	Met	Ser	Ála	Āsp	Met	Ser	Glu	Ile	Ğlu	Ala	Arg	Ile	
14		385	-1-	5			390	_				395			-		
	i 3 gcc		acc	aca	aac	aac		саσ	сса	аσа	cat.	aσa	tcc	atc	caa	gac	1427
1/	4 Ala	λla	Thr	Thr	Clv	Acn	Glv	Gln	Dro	Ara	Δra	Ara	Ser	Tle	Gln	Asp	
		Ата	1111	1111	СТУ	405	GIY	GIII	110	nry	410	1119	DCI		0111	415	
	5 400							+	~~+	~~~		3.00	aat	200	+ 02		1475
14	7 ttg	act	gta	act	gga	aca	gaa	Door	991	cay	y L y	ayc	ayı Cor	Ara	Cor	Cor	14/3
	8 Leu	Thr	vaı	Thr	_	Thr	GIU	Pro	GTÀ		Val	ser	ser	Ary		Ser	
14					420					425					430		1500
15	1 agt	ccc	agt	gtc	aga	atg	att	act	acc	tca	gga	cca	acc	tca	gaa	aag	1523
	2 Ser	Pro	Ser		Arg	Met	Ile	Thr		Ser	GLY	Pro	Thr		GIu	гàг	
15				435					440					445			
15	5 cca	act	cga	agt	cat	cca	tgg	acc	cct	gat	gat	tcc	aca	gat	acc	aat	1571
15	6 Pro	Thr	Arg	Ser	His	Pro	\mathtt{Trp}	Thr	Pro	Asp	Asp	Ser		Asp	Thr	Asn	
15			450					455					460				
	9 gga																1619
16	0 Gly	Ser	Asp	Asn	Ser	Ile	Pro	Met	Ala	Tyr	Leu	Thr	Leu	Asp	His	Gln	
16	_	465	-				470					475					
16	3 cta	caq	cct	cta	qca	ccg	tgc	cca	aac	tcc	aaa	gaa	tct	atg	gca	gtg	1667
16	4 Leu	Gln	Pro	Leu	Åla	Pro	Cys	Pro	Asn	Ser	Lys	Glu	Ser	Met	Ala	Val	
	5 480					485	-				490					495	
	7 ttt		cag	cat.	t.at.	aaa	atq	qca	caa	gaa	tat	atg	aaa	qtt	caa	aca	1715
16	8 Phe	Glu	Gln	His	Cvs	Lvs	Met	Ala	Gln	Ğlu	Tvr	Met	Lvs	Val	Gln	Thr	
16		O L C	0111		500					505	-1-		_1 -		510		
	, 1 gaa	att	aca	ttα		tta	cad	аσа	ааσ		σаа	cta	at.t.	αca	gaa	cta	1763
17	ı gaa 2 Glu	T10	31a	LLY	Tou	Lou	Cln	Ara	Lug	Gln	Glu	T.ell	Val	Δla	Glu	Len	_,,,,
		116	ніа	515	ьeu	ьеu	GIII	AIG	520	GIII	GIU	пси	Vul	525	GIG	LCu	
17	s 5 gac		+			~~~	~~~	<i>a</i> = = =		202	+ a+	000	ata		CaG	αaa	1811
																	1011
	6 Asp	GIN		GIU	гля	ASP	GŤII		ASII	1111	ser	AIG	540	vai	GIII	Giu	
17			530					535			-++	+~+		+	+	a2a	1859
. 17	9 cat	aaa	aag	CLL	tta -	gat	gaa	aac	aaa	age	CLL	CCL	mb-	Lac.	m	Cay	1033
	0 His		Lys	Leu	Leu	Asp		Asn	ьуs	ser	Leu		THE	туг	TYL	GIII	
18		545					550					555					1007
18	3 caa	tgc	aaa	aaa	caa	cta	gag	gtc	atc	aga	agt	cag	cag	cag	aaa	cga	1907
	4 Gln		Lys	Lys	Gln		Glu	Val	Ile	Arg		GIn	GIn	GIn	ьуs		
	5 560					565					570					575	
18	7 caa	ggc	act	tca	tga	ttct	ctg 9	ggac	cgtta	ac at	tttt	gaaat	t ato	gcaa	agaa		1959
18	8 Gln	Gly	Thr	Ser													
19	1 aga	cttt	ttt	ttta	aggaa	aa g	gaaaa	accti	t ata	aatga	acga	ttca	atga	gtg	ttago	cttttt	2019
19	3 ggc	gtgt:	tct	gaat	gcca	ac to	gccta	atati	t tgo	ctgca	attt	tttt	tcati	tgt '	ttati	tttcct	2079
19	5 ttt	ctca	tgg :	tgga	cata	ca a	tttta	actgi	t tto	catte	gcat	aaca	atggt	tag (catct	tgtgac	2139
19	7 ttg	aatg	agc .	agca	cttt	gc a	actto	caaaa	a cag	gatgo	cagt	gaad	ctgt	ggc .	tgtai	tatgca	2199
19	9 tgc	tcat	tqt ·	gtga	agget	ta g	cctaa	acaga	a aca	aggag	ggta	tcaa	aacta	agc ·	tgcta	atgtgc	2259
20	1 aāa	caqc	qtc	catt	tttt	ca ťa	attac	gaggt	t gga	aacc	tcaa	gaat	tgact	ttt	attci	ttgtat	2319
20	3 ctc	atct	caa	aata	ttaa	ta a	tttti	tttc	c caa	aaaga	atgg	tata	ataco	caa	gttaa	agaca	2379
20	5 aaa	tatt	ata .	aat.t	taga	at a	atto	ataal	t ata	atta	cqqa	aata	acgga	aac	cttta	agggat	2439
20	- <i>эээ</i> 7 aαt	teca	t.at.	aaaa	actti	tora:	tacca	agcat	t act	ttaa	atca	gtad	ctga	act	caqti	tccatc	2499
20	, ayı	July	-9-	99	5000	-5 4				5 5 '		,	- 9	-	,	-	

RAW SEQUENCE LISTING DATE: 08/30/2001 PATENT APPLICATION: US/09/830,144 TIME: 06:24:59

Input Set : A:\06501-076001.txt

Output Set: N:\CRF3\08292001\1830144.raw

209 cgtaaaatat gtaaaggtaa gtggcagctg ctctatttaa tgaaagcagt tttaccggat 2559 211 tttgttagac taaaatttga ttgtgataca ttgaacaaaa tggaactcat tttttttaag 2619 213 gagtaaagat tttctttaga gcacaatgga tctcgac 216 <210> SEQ ID NO: 2 217 <211> LENGTH: 579 218 <212> TYPE: PRT 219 <213> ORGANISM: Homo sapiens 221 <400> SEQUENCE: 2 222 Met Ser Thr Ala Ser Ala Ala Ser Ser Ser Ser Ser Ser Ala Gly 10 225 Glu Met Ile Glu Ala Pro Ser Gln Val Leu Asn Phe Glu Glu Ile Asp 228 Tyr Lys Glu Ile Glu Val Glu Glu Val Val Gly Arg Gly Ala Phe Gly 35 40 231 Val Val Cys Lys Ala Lys Trp Arg Ala Lys Asp Val Ala Ile Lys Gln 55 234 Ile Glu Ser Glu Ser Glu Arg Lys Ala Phe Ile Val Glu Leu Arg Gln 235 65 70 237 Leu Ser Arg Val Asn His Pro Asn Ile Val Lys Leu Tyr Gly Ala Cys 240 Leu Asn Pro Val Cys Leu Val Met Glu Tyr Ala Glu Gly Gly Ser Leu 100 105 110 243 Tyr Asn Val Leu His Gly Ala Glu Pro Leu Pro Tyr Tyr Thr Ala Ala 120 246 His Ala Met Ser Trp Cys Leu Gln Cys Ser Gln Gly Val Ala Tyr Leu 135 249 His Ser Met Gln Pro Lys Ala Leu Ile His Arg Asp Leu Lys Pro Pro 150 155 252 Asn Leu Leu Val Ala Gly Gly Thr Val Leu Lys Ile Cys Asp Phe 165 170 255 Gly Thr Ala Cys Asp Ile Gln Thr His Met Thr Asn Asn Lys Gly Ser 180 185 258 Ala Ala Trp Met Ala Pro Glu Val Phe Glu Gly Ser Asn Tyr Ser Glu 200 195 261 Lys Cys Asp Val Phe Ser Trp Gly Ile Ile Leu Trp Glu Val Ile Thr 215 264 Arg Arg Lys Pro Phe Asp Glu Ile Gly Gly Pro Ala Phe Arg Ile Met 265 225 230 235 267 Trp Ala Val His Asn Gly Thr Arg Pro Pro Leu Ile Lys Asn Leu Pro 245 250 270 Lys Pro Ile Glu Ser Leu Met Thr Arg Cys Trp Ser Lys Asp Pro Ser 260 265 273 Gln Arg Pro Ser Met Glu Glu Ile Val Lys Ile Met Thr His Leu Met 275 280 276 Arg Tyr Phe Pro Gly Ala Asp Glu Pro Leu Gln Tyr Pro Cys Gln Tyr 277 290 295 300 279 Ser Asp Glu Gly Gln Ser Asn Ser Ala Thr Ser Thr Gly Ser Phe Met 310 315 282 Asp Ile Ala Ser Thr Asn Thr Ser Asn Lys Ser Asp Thr Asn Met Glu

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/830,144

DATE: 08/30/2001
TIME: 06:24:59

Input Set : A:\06501-076001.txt

Output Set: N:\CRF3\08292001\1830144.raw

					225					220					335		
283	_	_			325	_	_	m1	71 .	330	3	T	61	Com		Tou	
	Gln	Val	Pro		Thr	Asn	Asp	Thr		гàг	Arg	ьеu	GIU	350	гуѕ	ьец	
286				340					345	a 1	a	01	3		0	T 0.11	
	Leu	Lys		Gln	Ala	Lys	Gln		Ser	Glu	ser	СТА		Leu	ser	Leu	
289			355					360			_	_	365		a	a 1	
291	Gly	Ala	Ser	His	Gly	Ser		Val	Glu	Ser	Leu		Pro	Thr	ser	GIU	
292		370					375					380		_	-1.		
294	Gly	Lys	Arg	Met	Ser	Ala	Asp	Met	Ser	Glu	Ile	Glu	Ala	Arg	ITE	Ala	
295	385					390					395			_		400	
297	Ala	\mathtt{Thr}	\mathtt{Thr}	Gly	Asn	Gly	Gln	Pro	Arg		Arg	Ser	Ile	Gln	Asp	Leu	
298					405					410					415		
300	Thr	Val	Thr	Gly	Thr	Glu	Pro	Gly	Gln	Val	Ser	Ser	Arg	Ser	Ser	Ser	
301				420					425					430			
303	Pro	Ser	Val	Arg	Met	Ile	Thr	Thr	Ser	Gly	Pro	Thr	Ser	Glu	Lys	Pro	
304			435					440					445				
306	Thr	Arg	Ser	His	Pro	${\tt Trp}$	Thr	Pro	Asp	Asp	Ser	Thr	Asp	Thr	Asn	Gly	
307		450					455					460					
309	Ser	Asp	Asn	Ser	Ile	Pro	Met	Ala	Tyr	Leu	Thr	Leu	Asp	His	Gln	Leu	
	465	-				470					475					480	
	Gln	Pro	Leu	Ala	Pro	Cys	Pro	Asn	Ser	Lys	Glu	Ser	Met	Ala	Val	Phe	
313		;			48					490					495		
315	Glu	Gln	His	Cvs	Lys	Met	Ala	Gln	Glu	Tyr	Met	Lys	Val	Gln	Thr	Glu	
316				500	-				505	-		_		510			
318	Ile	Αla	Leu	Leu	Leu	Gln	Arq	Lvs	Gln	Glu	Leu	Val	Ala	Glu	Leu	Asp	
319			515				_	520					525				
	Gln	Asp		Lvs	Asp	Gln	Gln	Asn	Thr	Ser	Arq	Leu	Val	Gln	Glu	His	
322		530		-1-	1		535				_	540					
	Lys		Leu	Leu	Asp	Glu		Lvs	Ser	Leu	Ser	Thr	Tyr	Tyr	Gln	Gln	
	545	_1_				550		-			555		_	_		560	
	Cys	Lvs	Lvs	Gln	Leu		Val	Ile	Ara	Ser	Gln	Gln	Gln	Lys	Arg	Gln	
328		<i>10</i>			565				,	570				-	575		
	Gly	Thr	Ser		555												
	<21			ои о	: 3												
	<21																
	<21																
	<21					o sai	oiens	S									
	<22				110111	J 54,	, _ 0										
	<22				CDS												
	<22		-			· ·	1541	١									
	<40					, (′									
344	gaa	ttaa	taa .	ccca.	cadd	at to	act c	сааσ	atα	aca	aca	caσ	аσσ	aσσ	agc	tta	53
345		cccy	Lyy '	cccg	cugg	g c c		cuug	Met	Ala	λla	Gl·n	Arg	Ara	Ser	Leu	
346									1100	1114		0	5	9			
	ctg	034	20+	as a	Ca C	Сал	CCZ	age	taa	aca	gat	σac	cta	cct	ctc	tac	101
240	Leu	Cay	ayı Cor	gay	Cay Cln	Cay	Dro	Ser	Trn	Thr	Agn	Agn	Len	Pro	Leu	Cvs	
350		10	Set	GIU	GIII	GIII	15	OCI	P	T 11.L	1155	20				-1-	
	cac		+ <+	aaa	a++	aac		acc	tcc	aac	cac		tac	tet	act	gat	149
252	His	Ton	CO.	999 C1++	9 L L	990 610	Cor	γcc	Ser	Δan	Ara	Ser	Tvr	Ser	Ala	Asp	
354		neu	Ser	ату	val	30	Der	ara	DET	11011	35		-1-			40	
334	∠ 3					50					55					• •	

-VERIFICATION SUMMARY

DATE: 08/30/2001

PATENT APPLICATION: US/09/830,144

TIME: 06:25:00

Input Set : A:\06501-076001.txt

Output Set: N:\CRF3\08292001\I830144.raw